DOCUMENT RESUME

ED 218 355 TM 820 404

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TITLE Measuring the Effectiveness of Title I: A Summary of the 1979-80 State Title I Evaluation Reports.
PUB DATE Mar 82
NOTE 27p.; Paper presented at the Annual Meeting of the American Educational Research Association (66th, New York, NY, March 19-23, 1982).

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Academic Achievement; *Educational Assessment; Elementary Secondary Education; Ethnic Distribution; Federal State Relationship; *National Programs; National Surveys; Parent Participation; *Program Effectiveness; *Program Evaluation; Staff Utilization; Student Participation; Summer Schools
IDENTIFIERS Elementary Secondary Education Act Title I; *Title I Evaluation and Reporting System

ABSTRACT

The Title I Evaluation and Reporting System (TIERS), a part of the Elementary and Secondary Education Act of 1965, provides models for uniform evaluation procedures and criteria to be used by local and state agencies and aggregated into a cohesive Federal report. The report of data collected from 56 states and territories to the U. S. Department of Education is discussed. The districts covered, students served, services provided and staff characteristics are described with statistical data regarding the number of students served by grade level and by service area during the regular 1979-80 term in public schools, non-public schools, and local institutions for neglected or delinquent children. The percent of Title I population served, their ethnic characteristics, parent activity and full time staff participation are described. Summer activities are included. The data from grades two to twelve on student achievement levels and gains in reading, mathematics and language arts are presented with the effects of fall to spring test cycles. (CM)

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Measuring the Effectiveness of Title I: A Summary of the 1979-80 State Title I Evaluation Reports

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Department of Education

March 1982

Title I of the Elementary and Secondary Education Act has been providing funds to State and local education agencies since 1965 "to provide financial assistance ... to expand and improve ... educational programs ... which contribute particularly to meeting the special needs of educationally deprived children" (ESEA Title I, Section 101, P.L. 89-10, as amended). Title I is the largest Federal aid program in elementary and secondary education ever enacted, with appropriations growing from $959 million in FY 1966 to over three billion dollars in FY 1980.

Evaluation requirements have been part of the law from its beginning, but no common reporting system was used. (See Wisler and Anderson, 1979 for a more detailed discussion of federal evaluation of Title I programs over the years.) Data from State and local education agencies were not comparable, and Congress attempted to deal with the problem of the lack of comparable data by enacting Section 151 of ESEA Title I in the Education Amendments of 1974 (P.L. 93-380). Districts were required to evaluate the effectiveness of programs and submit their evaluations to the States, which in turn reported to the U.S. Commissioner of Education (now the Secretary of Education). The Commissioner was required to provide models for evaluation which included uniform procedures and criteria to be used by local and State agencies.

In 1974, the Department of Education (ED) awarded a contract to RMC Research Corporation to develop models for the reporting and evaluation of Title I projects. There were numerous constraints placed on the models due both to the nature of the Title I program and to the requirement that all local education agencies would be required to submit evaluation reports. A first constraint was that since the Title I program was designed to serve the neediest students in each eligible district, and since nearly all districts (14,000 out of 16,000, with primarily only very small districts not receiving Title I grants) had Title I programs, most standard experimental designs calling for a comparison group of unserved students were impossible--indeed, illegal--to implement. A second constraint was that the majority of districts were small and did not have experienced evaluators or the resources to purchase evaluation services. Thus, any reporting and evaluation system would need to be relatively easy for district personnel to understand and to implement and would need to be restricted to a bare minimum of information. Third, the data from the districts needed to be easily aggregatable to allow for a cohesive Federal report.

While trying to work within these constraints, RMC and the Office of Education developed the Title I Evaluation and Reporting System (TIERS) and its supplemental material. Numerous modifications were made to the

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TIERS during review by State and local education agency officials. In 1979, the Office of Education published regulations outlining the evaluation models, and after the normal review procedures, the regulations became final. The components of TIERS include:

- o three evaluation models plus options for alternative models,
- o a reporting system, including descriptive information information,
- o supporting documents, including a handbook of instructions for reporting, a policy manual, and the Evaluators' References, and
- o technical standards.

All States were required to collect the required information from their districts, compile the local reports into a state report, and submit the report to the federal government using the common evaluation system. The first year of uniform implementation of TIERS was the 1979-80 school year, with reports being sent to the Office of Education (now the Department of Education) by February 1, 1981. A second report is due from the States on February 1, 1983, and will contain data from both the 1980-81 and 1981-82 school years.

By August of 1981, ED had received reports from all State Education Agencies with Title I programs. Information on the characteristics of students served, the nature of the services provided, and the numbers and characteristics of others (staff, parents, and administrators) who work in Title I was collected using a form commonly called the TIERS form. Reports were received from SEAs throughout the spring and summer of 1981 and numerous revisions were made as State and Federal personnel reviewed the forms during the summer and fall. In October, the decision was made to procede with analysis.

Participation Information

Participation information was received from all 50 states, the District of Columbia, Guam, Puerto Rico, the Trust Territories of the Pacific Islands, the Virgin Islands, and the Bureau of Indian Affairs. Information on the characteristics of students served, the nature of the services provided, and the number and characteristics of others (staff, parents, and administrators) who work in Title I was collected. Often SEAs had not collected particular information (such as ethnic data) or had not collected information in the required form (such as not reporting staff in full-time equivalents). For the first time, however, ED had comparable data from each State, and the quality of data submitted was probably higher that that received in previous years.

Number Served by Grade Level During the Regular Term

States were required to report the number of Title I participants during the regular term of 1979-80 by public and nonpublic designation and grade level. Participants in local, but not State, institutions for

neglected or delinquent children were to be included. Any student who received any amount of Title I funded instruction in a subject matter area was considered to be a participant, and each student was to be counted only once regardless of the number of subject matter areas in which he or she received instruction. Participants in ungraded classes were to be assigned to grades on the basis of age at the beginning of the school year. (See the Handbook: Instructions for Title I Reporting, 1980 for complete information.)

Data were received from all 56 SEAs (see Table 1). However, some SEAs reported pupils in ungraded classes in the totals but not in the individual grades, and some SEAs did not report local Neglected or Delinquent program students by grade level and public/nonpublic designation; therefore the rows and columns in Table 1 will not add to the total number served.

Table 1

Number of Regular Term Title I Participants by Grade Level and Public/Nonpublic Status during 1979-80

Grade	Public		Nonpublic		Total	
	Number	(%)	Number	(%)	Number	(%)
Prekindergarten	61,587	(1)	677	(0.4)	62,234	(1)
Kindergarten	293,182	(6)	6,666	(4)	299,848	(6)
1	616,131	(12)	20,917	(11)	637,048	(12)
2	666,218	(13)	26,849	(14)	693,067	(13)
3	673,650	(13)	27,439	(14)	701,089	(13)
4	616,716	(12)	25,834	(14)	642,550	(12)
5	601,055	(12)	23,404	(12)	624,459	(12)
6	501,515	(10)	20,675	(11)	522,190	(10)
7	383,588	(7)	13,486	(7)	397,074	(7)
8	312,929	(6)	10,585	(6)	323,514	(6)
9	212,465	(4)	6,374	(3)	218,839	(4)
10	122,516	(2)	3,005	(2)	125,521	(2)
11	69,100	(1)	1,797	(1)	70,897	(1)
12	40,283	(1)	1,176	(1)	41,459	(1)
Total	5,170,935	(100)	188,884	(100)	5,359,819	(100)
Total[1] (including ungraded)	5,173,718		189,654		5,402,341[2]	

1 Some SEAs reported pupils in ungraded classes in the totals but not in individual grades.

2 Some SEAs did not report local N or D students by grade level and public/nonpublic designation.

During 1979-80, approximately 5.4 million students were served by programs funded by Title I grants to local education agencies. Approximately 3.5 percent of these students were in nonpublic schools, and the majority, both in public and nonpublic schools, were in the elementary grades. Approximately 72% of public school participants and 76% of nonpublic school participants were in grades 1 through 6. Only 8% of participants were in grades 9 through 12, and 7% were in prekindergarten and kindergarten programs.

Public school participation. Forty-four SEAs reported serving public school students at the prekindergarten level. However, the majority of these SEAs served small numbers of students; only 23 SEAs served more than 500 students at the prekindergarten level. Fifty-four SEAs served students at the kindergarten level; 41 served more than 500 kindergarten students. All 56 SEAs served students in grades 1 through 3, all but one SEA (the District of Columbia) served students in grades 4 and 5, and all but two SEAs (D.C. and Guam) served public school students in grade 6. At the junior high and high school levels the number of students served decreased rapidly, especially at the higher grades. In grades 12, only 40,283 public school students were served by Title I programs.

Nonpublic school participation. Fourteen SEAs reported serving nonpublic school students at the prekindergarten level; only 677 prekindergarten students were served nationwide. Thirty-five SEAs served kindergarten students, and all SEAs except the BIA (which would not be expected to serve nonpublic school students) served students at some combination of grades 1 through 12. Nonpublic participation decreased rapidly after grade 8, however, and in grade 12 only 1,176 students in 27 SEAs were in Title I programs.

Participation in local institutions for the neglected or delinquent. SEAs reported the total number of Title I participants during the regular term in local, but not State, institutions for neglected or delinquent children. Each student was to be counted once regardless of the number of times he or she entered a local institution for neglected or delinquent children. Forty-two SEAs reported serving a total of 71,364 students. The range of the number of students served was from 41 to 33,599. Twenty States reported serving more than 500 students and 13 reported serving fewer than 250 students.

Number of Students Served During the Regular Term by Service Area

SEAs reported the number of Title I participants during the regular term by type of service and public, nonpublic, and local neglected or delinquent designation. Table 2 presents this information. Service areas were divided into instructional areas and supporting areas. Instructional areas include English to limited-English speaking students, reading, English language arts other than reading or services to limited-English speaking, mathematics, vocational education, special activities for the handicapped, and other. Other instructional areas include such areas as natural sciences, social sciences and social studies, business, health, safety, driver and physical education, and industrial arts. Supporting areas include the following: attendance, social work, guidance and psy-

chology; health and nutrition; pupil transportation; and other. Attendance and social work services include activities which are designed to prevent or solve pupil problems involving the home, the school, and the community. Health and nutrition services include activities to provide medical, dental, psychiatric, and nurse services and nutrition activities which have as their main purpose the management of the food services program of the school system and the preparation and serving of regular and incidental meals, lunches, or snacks in connection with regular school activities. Transportation includes activities which have as their purpose the convey-

Table 2

Title I Participants by Service Area During the Regular Term of 1979-80

Service Area	Type of Participant						Total[3]	
	Public		Nonpublic		Local N or D			
	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Instructional								
Reading	4,009,200	(79)	148,972	(78)	34,917	(49)	4,197,336	(78)
Mathematics	2,388,955	(47)	68,875	(36)	21,551	(30)	2,483,044	(46)
Language Arts	1,030,307	(20)	16,784	(9)	3,583	(5)	1,053,144	(19)
Other	1,014,714	(20)	16,818	(9)	4,707	(7)	1,039,651	(19)
Limited English	351,822	(7)	12,440	(7)	1,602	(2)	374,590	(7)
Vocational	5,087	(--)	39	(--)	15	(--)	5,571	(--)
Special for Handicapped	7,623	(--)	1,320	(1)	141	(--)	9,084	(--)
Supporting								
Health, Nutrition	1,504,674	(29)	12,464	(7)	1,660	(2)	1,518,798	(28)
Other	408,841	(8)	10,186	(5)	2,043	(3)	421,070	(8)
Attendance, guidance	767,845	(15)	16,755	(9)	8,015	(11)	792,615	(15)
Transportation	132,637	(3)	4,877	(3)	634	(1)	138,148	(3)
Total Number Served	5,102,324[4]		189,654		71,364		5,402,311	

3 Some States counted N or D pupils twice (the N or D pupils are included in Public and Nonpublic as well as the N or D column); others listed only Totals with no Public, Nonpublic and N or D breakdowns. Therefore, the Total column is not the sum of the other three columns.

4 This number is an estimate obtained by subtracting all local Neglected or Delinquent participants from the total number of Public participants. Since some local Neglected or Delinquent participants may be in Nonpublic institutions, the number underestimates the number of Public participants not in Neglected or Delinquent programs. For the same reason, the number of Nonpublic participants is an overestimate.

ance of pupils to and from school activities, either between home and school or on trips to school activities. A student was counted once for each instructional area in which he or she received services. A student was counted once for each category of supporting services that he or she received.

All except one SEA (the BIA) reported the number of students served by service area. Based on the 55 SEAs which reported this information, 4,197,336 (78%) of the Title I participants received services in reading. The second most common area for services was mathematics (2,483,044 students, or 46%). The three next most common areas, health services (28%), language arts (19%), and other instructional services (19%), together served fewer students than were served by reading. The fewest students were served by programs in vocational education (only 7 SEAs reported programs in this area) and special activities for the handicapped (14 SEAs reported programs).

Public school participants. In 1979-80, reading continued to be the most common service area in Title I. Over four million public school Title I students (79%) received services in reading. Mathematics, with over 2.3 million students served (47%), was second, and health and nutrition, with over 1.5 million students (29%), was third. Over one million students reportedly were served by other instructional areas; three-quarters of these students were in one State (California), which reported that the students in this category primarily received multicultural services. Other common areas were language arts programs in Spanish (Puerto Rico) and early childhood projects.

Nonpublic school participants. Nearly 190,000 nonpublic students received Title I services during the regular term of 1979-80. Seventy-eight percent of nonpublic Title I participants received services in reading. This percentage is comparable to the percentage of public school Title I students who receive reading. The percentage of Title I students who receive mathematics instruction funded by Title I was 36% for nonpublic versus 47% for public students. No more than 9% of the nonpublic Title I students received services in any of the other instructional or support services.

Participants in local institutions for the neglected or delinquent. Over 71,000 students were reported to have been served by Title I programs in local institutions for neglected or delinquent children. More of these students (49%) received services in reading than in any other area. Approximately 30% of the students received Title I mathematics instruction; no more than 11% of the students received services in any of the other instructonal or support area.

Percent of Population Served by Title I

In order to obtain an estimate of the percentage of public school students who were served by Title I programs (Table 3), the total elementary and secondary public school enrollment in the fall of 1978 (National Center for Education Statistics figures) was used. The enrollment included the 50 states plus the District of Columbia. (Enrollment figures for

the fall of 1979 were not available at the time the analyses were made for the 1979-80 Title I data.) During the 1979-80 school year, there were 4,929,504 Title I students from the 50 states plus the District of Columbia; using the 1978 enrollment as an estimate of the 1979 enrollment, it can be estimated that approximately 11.6% public school students were served by Title I. Estimates were not made by grade level but it is speculated that a larger percentage of students were served at the lower grades than at the higher grades. The percentage of students served varied across States from 4% to 26%. The 14 states with State compensatory education programs serving populations similar to Title I served 11.9% of their students with Title I programs; States without such state compensatory education programs served 11.2% of their students by Title I.

Nonpublic institutions served 189,654 students in Title I programs in 1979-80. NCES figures for 1978-79 estimated that there were 5,085,633 private school students. Therefore, the approximate percentage of nonpublic school students served was 3.7%.

Table 3

Percent of Students in Title I Programs in States With and Without State Compensatory Education Programs

	Number of FY 80 Public School Title I Students	1978 School Enrollment	Percent Served in Title I	
			Average	Range
States with state compensatory education programs	2,584,522	21,640,352	11.9	6.6 - 18.6
States without state compensatory education programs	2,344,982	20,919,584	11.2	4.0 - 26.3
All 51 States	4,929,504	42,559,808	11.6	4.0 - 26.3

Ethnic Characteristics of Title I Participants

States were asked to record the number of Title I students during the regular term according to five ethnic groups: American Indian or Alaskan Native, Asian or Pacific Islander, Black not Hispanic, Hispanic, and White not Hispanic. Each student was to be counted in only one group. Nine SEAs did not report ethnic group information, and other States used estimates or had incomplete information. Table 4 presents the ethnic group characteristics of Title I students for the reporting SEAs and for all SEAs using estimates for the missing data. The missing data were estimated

Table 4

Ethnic Characteristics of Title I Participants
During the Regular School Term in 1979-80

All reporting SEAs[5]

Ethnic Group	Number	(%)
White, Not Hispanic	2,490,868	(51)
Black, Not Hispanic	1,399,044	(29)
Hispanic	768,542	(16)
Asian or Pacific islander	98,207	(2)
American Indian	93,785	(2)

All SEAs[6]

Ethnic Group	Number	(%)
White, Not Hispanic	2,947,006	(55)
Black, Not Hispanic	1,466,833	(27)
Hispanic	774,529	(14)
Asian, Pacific Islander, or American Indian	192,577	(4)

5 Nine SEAs did not report ethnic breakdowns.
6 State population data were used to estimate missing information.

by use of 1970 Bureau of Census population estimates to proportion the Title I students into ethnic categories. This procedure will probably overestimate the number of non-Hispanic White Title I participants.

Based on available information, it is estimated that slightly over one-half of Title I participants during the regular term of 1979-80 were non-Hispanic whites, slightly more than one-quarter were non-Hispanic Blacks, between one-seventh and one-sixth were Hispanic, and less than five percent were Asian, Pacific Islander, or American Indian.

Title I Parent Activity

Table 5 presents information on parent participation in Title I activities. Over 272,000 elected members of school advisory councils were parents of Title I students; only 19,000 were parents of nonpublic school students. People who are not parents of Title I children may serve as members of school advisory councils, as long as the majority of council members are parents of Title I children. No information was collected the number of other members; however, since nearly 399,000 elected members of councils received training related to school advisory

Table 5

Title I Parent Activity Information for 1979-80

Advisory Councils	
Number of elected members of a school advisory council who:	
were parents of Title I public school students	272,556
were parents of Title I nonpublic school students	19,390
received training related to school advisory council activities	398,952
Number of local education agencies that provided Title I funds for advisory council activities	6,624
Parent Activities	
Number of parents of Title I students involved in the following Title I activities:	
project planning, implementation, and/or evaluation	387,235
volunteers in the Title I classroom	126,238
volunteers in Title I activities outside the Title I classroom	90,410
Number of other parents involved in the activities listed	163,322
Average number of people who attended school advisory council meetings:	
Mean	13.8
Range	4.0 - 115.9

councils, it can be inferred that at least 107,000 elected members of school advisory councils were not parents of Title I students. Over 6600 local education agencies provided Title I funds for advisory council activities. The average number of people attending school advisory councils was 14. This number includes parents of Title I and non-Title I students as well as community personnel, school personnel, and any other individuals who attended the meetings.

Large numbers of parents of Title I students also were involved in Title I activities such as project planning, implementation, and evaluation (387,000), Title I classroom volunteers (126,000), and volunteers in Title I activities outside the Title I classroom (90,000). Over 163,000 other parents also were involved in these activities.

Title I Staff

Table 6 presents the number of staff members employed full-time in Title I projects. Staff members who worked for Title I projects for a greater percentage of time than they were paid with Title I funds were counted in terms of the amount of time they worked in Title I, not the amount of time they were paid by Title I. (For example, if a teacher worked full-time in a Title I project, but 25% of his salary was paid with district funds and 75% with Title I funds, the teacher would be counted as one full-time equivalent, not .75 FTE.) Staff members were recorded in seven categories: administrative staff, teachers, teacher aides, curriculum specialists, staff providing supporting services (such as social work, guidance, psychological counseling, health, nutrition, attendance, library, speech pathology, audiology, evaluation, and psychological testing services), clerical staff, and other (e.g., accountants, bookkeepers, custodians, vehicle operators, food service personnel).

Over 200,000 full-time-equivalent staff members, or one for approximately every 27 Title I students, served the Title I program during the regular term of 1979-80. Thirty-nine percent of the staff members were teachers and 46% were teacher aides; thus 85% of the staff were directly involved with providing educational services to Title I children.

Table 6

Number of Staff Employed in Title I Projects
During the 1979-80 Regular School Term in Full-Time Equivalents

Job Classification	Full-time Equivalents	(%)
Administrative Staff	6,312.0	(3)
Teachers	78,494.8	(39)
Teacher Aides	91,457.2	(46)
Curriculum Specialists	6,241.8	(3)
Staff Providing Supporting Services	6,303.7	(3)
Clerical Staff	5,076.4	(3)
Other	6,607.6	(3)
Total	200,493.5	(100)

Table 7 presents the number of staff members who received Title I-funded training any time between July 1, 1979 and June 30, 1980. Staff are classified into two groups: those whose salaries are paid primarily by Title I funds (Title I Staff) and those whose salaries are not paid by Title I funds (Non-Title I Staff). Only staff who had received either in-service or pre-service Title I funded training that was sponsored by the school or by the local education agency were counted, not those who had received training sponsored by the State.

Over 300,000 staff members received Title I funded training sponsored by either the school or local education agency, and nearly 186,000 (62%) were Title I staff members. It is not possible to compare directly the number of staff members employed and the number trained since the former number is in FTEs and the latter number is not. However, if the number of FTE employees is used as a minimum figure (i.e., an FTE count of 200,494 means that there are at least 200,494 people employed, and although in all probability there are many more than that, one has no easy method of determining how many more from the data available) we can obtain an upper bound estimate in the percentage of Title I staff trained, which is 93 percent.

Table 7

Number of Staff Receiving Title I Funded Training
Between July 1, 1979 and June 30, 1980

Job Classification	Title I Staff	Non-Title I Staff	Total
Administrative Staff	6,893	10,387	17,280
Teachers	79,096	85,620	164,786
Teacher Aides	85,836	5,892	91,728
Curriculum Specialists	4,601	1,642	6,243
Other	9,243	10,764	20,007
Total[1]	185,996	114,375	300,371

[7] One state did not report staff by job classification; therefore, the total is not the sum of the numbers in each category.

Summer Term Activities

SEAs were requested to submit information on the number of students served by grade level and public/nonpublic designation, the number of students served by service area, student ethnic group counts, and the number of staff employed by job classification for the summer term of 1980. The summer term was defined to be that period of time directly following the regular school year of 1979-80. Information on summer school programs was less complete than information on the regular school year and in many cases the numbers should be considered lower bounds. Eight SEAs did not report on summer term activities. Three stated that there were no summer programs, one stated that the summer program was very limited and no information was available, and it was unclear from the reporting forms submitted by the other four SEAs whether or not there were summer programs.

Participants. Based on the information received (see Table 8), over 314,000 students participated in Title I programs during the summer. Nearly 12,000 of these students were in nonpublic schools. The majority, 71%, were in grades 1 to 6; only 4% percent were in grades 9 to 12. Of these students, 6139 were in local institutions for the neglected or delinquent in 24 SEAs.

Services provided. Table 9 provides information on participation by service area. A majority of the students received instruction in reading (66%) or mathematics (63%). Only five SEAs reported providing vocational services, and only five reported providing special services for the handicapped.

Staff employed. Summer school Title I staff were classified in four categories: administrative staff, teachers, teacher aides, and other. Over 31,000 FTE staff members (see Table 10) were employed in Title I projects, or roughly one for every 10 Title I participants. The majority of the staff members, 84%, were teachers or teacher aides.

Table 8

Number of Title I Participants During the Summer Term in 1979-80 by Grade Level and Public-Nonpublic Designation[8]

Grade	Public		Nonpublic		Total	
	Number	(%)	Number	(%)	Number	(%)
Prekindergarten	7,241	(3)	210	(2)	7,451	(2)
Kindergarten	14,818	(5)	1,858	(15)	16,676	(6)
1	46,523	(16)	1,488	(12)	48,011	(16)
2	51,682	(18)	1,568	(13)	53,250	(18)
3	47,922	(17)	1,620	(13)	49,542	(16)
4	32,326	(11)	1,478	(12)	33,804	(11)
5	28,640	(10)	1,244	(10)	29,884	(10)
6	21,677	(8)	1,034	(9)	22,711	(8)
7	14,594	(5)	469	(4)	15,063	(5)
8	9,268	(3)	395	(3)	9,663	(3)
9	6,491	(2)	222	(2)	6,713	(2)
10	3,680	(1)	238	(2)	3,918	(1)
11	2,326	(--)	148	(1)	2,474	(1)
12	1,232	(--)	36	(--)	1,268	(--)
Total	288,420	(100)	12,008	(100)	300,428	(100)
Total including all ungraded and N or D	301,422		12,816		314,252	

8 Data are incomplete due to incomplete reporting and represent a lower bound on the actual number served.

Table 9

Title I Participation by Service Area for the 1979-80 Summer School Term

Service Area	Type of Participation						Total	
	Public		Nonpublic		Local N or D			
	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Instructional								
Reading	194,018	(66)	9,170	(72)	4,581	(75)	208,768	(66)
Mathematics	189,616	(64)	6,204	(48)	3,114	(53)	198,934	(63)
Other	85,142	(29)	1,958	(15)	832	(14)	87,932	(28)
Language Arts	44,086	(15)	1,484	(12)	780	(13)	46,350	(15)
Limited English	45,370	(15)	173	(1)	24	(--)	45,567	(15)
Vocational	955	(--)	29	(--)	118	(2)	1,102	(--)
Special for Handicapped	382	(--)	15	(--)	0	(--)	397	(--)
Supporting								
Transportation	90,559	(31)	5,352	(42)	250	(12)	95,683	(30)
Attendance	71,688	(24)	894	(7)	656	(11)	73,237	(23)
Other	68,899	(23)	279	(2)	344	(6)	69,522	(22)
Health	44,737	(15)	2,156	(17)	301	(5)	47,194	(15)
Total Number Served	295,303[9]		12,816		6,139		314,252	

9 This number is an estimate obtained by subtracting all local Neglected or Delinquent participants from the total number of Public participants. Since some local Neglected or Delinquent participants may be in Nonpublic institutions, the number is an underestimate. For the same reason, the number of Nonpublic participants is an overestimate.

Table 10

Number of Staff Employed in Title I Projects During the Summer Term of 1979-80 in Full-Time Equivalents

Job Classification	Full-Time Equivalents	(%)
Administrative Staff	1,214.5	(4)
Teachers	18,612.6	(59)
Teacher Aides	7,992.4	(25)
Other	3,738.5	(12)
Total	31,558.0	(100)

Student Achievement

All 56 State education agencies were required to submit achievement information for reading, mathematics, and language arts programs in grades 2 through 12. SEAs had the option of reporting data from all of their local education agencies (LEAs) or from a sample of one-third of the LEAs. Twenty SEAs reported on a sample of their LEAs, and their test data were weighted by a factor of three for all analyses. In a few cases, inclusion of a large city in the sample may have caused the sample to be weighted too heavily, but the overall effect of this should be minimal.

Achievement information was reported separately by subject, grade, and test interval but was combined across test and model for the state aggregate. Virtually all LEAs were reported to be using the norm-referenced model, Model A. (See Horst, Tallmadge, and Wood, 1975 for a description of the models.) For this report, only data from the 50 states and the District of Columbia were analyzed.

SEAs reported, for each grade, test cycle, and subject combination, membership, the number of students with both pretest and posttest scores, the weighted mean posttest score in Normal Curve Equivalent units (NCEs), and the weighted mean gain in NCEs. The NCE is a standard score metric with a mean of 50 and a standard deviation of 21.06. The use of a standard score metric allows arithmetical computations of the data which would not be possible with percentiles.

In addition to the state aggregate information in grades 2 through 12, SEAs reported project level information for grades 2, 6, and 10. Project level information included an LEA identification code, a project code, a subject matter code, a model-test interval code, hours per week of instruction, the total number of hours of project instruction, the student-to-instructor ratio, membership, the number of students with pre- and posttest scores, the mean posttest NCE score, the mean NCE gain, and a posttest identification code.

The State aggregate data for each subject matter area are discussed separately below. Three types of scores are used in the discussion: NCEs, percentiles, and a percent additional growth index. Pretest, posttest, and gain scores are reported in NCEs; the pretest NCE score was obtained by subtracting the gain NCE from the posttest NCE. Federal NCE data are weighted averages of the State level NCE information. The percent additional growth index is the amount of observed growth beyond the growth required to maintain a particular achievement level from pretest to posttest. Since different expected growth values are found across different tests, an average figure based on five commonly used tests was used here. (See Gabriel, 1981 for a complete discussion of norm-referenced growth expectations.) Growth expectations decrease with increasing grade levels; therefore the same NCE gain would translate into a greater percent additional growth at a higher grade level than at a lower one. A percent additional growth of zero would indicate that the students had gained no more or less than expected; a gain of 25% would be 25% greater growth than expected, and a gain of -25% would show a rate of growth only three-quarters as great as expected without the program. Caution should be exercised when interpreting these figures.

Test Cycle Effects

Different patterns of results were found for students tested on a fall-to-spring schedule (typically October to April) and those tested on an annual schedule (typically April to April). The gains for students tested annually are uniformly lower than the gains for students tested fall-to-spring. The posttest scores show a tendency to be similar for the two groups; therefore, the pretest scores tend to be lower for the fall-to-spring test group. The differences in annual and fall-to-spring test results have been noted in numerous evaluations. Some of the reasons postulated include the following: student forget what they have learned during the school year over the summer, different student populations are tested annually as opposed to fall-to-spring, a greater proportion of program participants are included in fall-to-spring evaluations, anomalies in test norms, and greater accountability in annual testing programs.

Achievement Level and Gains

Tables 11 through 16 show the achievement level and gains of students included in the evaluation of reading mathemetics, and language arts programs. The figures provided in these tables are the weighted average of the state data provided. Tables 18 through 21 present the minimum, maximum, and median values reported by state for reading and mathematics. Only SEAs with at least 100 students with pretest and posttest information were included in the Tables 17 through 20.

Reading. Students tested on an annual resting cycle showed modest positive gains at all grade levels except grades 10 and 11. The largest gain was reported in grade 6, with an NCE gain of 3.2 and a percent additional growth of 42%. Differences among the grades are small, however, and should not be interpreted to indicate actual differences in program effectiveness at different grade levels without additional information. There was great variation among states on the gains and pretest standing reported. The range of reported gain scores tends to decrease over the grades, although considerable variation is found at all grade levels. Considerable variation also is found among the States among the weighted mean pretest scores. Across all States, students in Title I programs have a mean NCE percentile equivalent of about 22 in the elementary grades. Since this percentile is obtained from a mean value, it is not possible to determine exactly how many students fall above and below this number, but if the distribution of student scores were normally distributed, half of the students would fall above and half below the mean. Therefore, we can roughly estimate that half of the students fall below the 22nd percentile nationally. Some States report figures much higher or lower than this, however. At grade 2, the lowest mean NCE percentile equivalent was 9 and the highest was 50. A rough estimate, then, shows that in one State about half of the second grade students fell below the 9th percentile, while in another State about half fell below the 50th percentile, based on students with both pretest and posttest scores. Clearly, different types of students may be being served in different States.

Gains for students tested on a fall-to-spring testing cycle were higher than those for students tested annually, with NCE gains tending to decrease across grade levels from a high of 9.4 in grade 2 to a low of 3.2 in grade 11. The percent additional growth index tends to increase across the grade levels even though the NCE gains decrease because there is a lower expected growth rate in the higher grades. Wide variation in gains and achievement status were found across grades and States for students tested on a fall-to-spring cycle.

Mathematics. Students tested on an annual testing cycle showed modest positive gains at all grades except grade 10. The largest gain was reported for grade 6, with an NCE gain of 3,9 and a percent additional growth of 44%. Differences among grades are small and should be interpreted with caution. Variability among the States was even greater for mathematics than for reading. There was great variation among the States in the gains reported, particularly in the elementary grades. Considerable variation also was found among the weighted mean pretest scores reported by States, with a range at grade 4 from the 8th percentile to the 49th percentile.

Gains for students tested on a fall-to-spring cycle were higher than those for students tested annually, with NCE gains tending to decrease across the grade levels from a high of 10.5 in grade 2 to a low of 5.3 in grade 10. The percent additional growth index increases across grade levels even though the NCE gains decrease because of the lower expected growth rate in the higher grades. Wide variation in gains and achievement status were found across the States for students tested fall-to-spring as well as for those tested annually.

Language Arts. Far fewer students participated in language arts programs than in reading and mathematics. Students tested on an annual testing cycle showed modest positive gains through grade 9 and modest losses in grades 10 through 12. The size of the gains was very similar to the size of the reading and mathematics gains. As with reading and mathematics, the fall-to-spring gains are larger than the annual gains. Unlike reading and mathematics, however, the pretest scores for the two groups are similar.

Table 11

1979-80 Title I Reading Achievement Results
for Students Tested on a Full-Year Schedule
(50 States plus the District of Columbia)

Grade	Weighted Number Tested	Normal Curve Equivalent			Percentile		Percent Additional Growth
		Pretest	Posttest	Gain	Pretest	Posttest	
2	85,019	37.6	38.6	1.0	28	29	4
3	108,708	34.3	36.7	2.4	23	26	17
4	108,576	34.7	36.6	1.9	23	26	20
5	112,387	33.9	36.2	2.3	22	26	32
6	107,706	33.9	37.2	3.2	22	27	42
7	66,923	33.9	35.8	1.8	22	25	27
8	58,026	33.6	35.8	2.2	22	25	31
9	30,082	32.0	33.8	1.8	20	22	38
10	14,215	30.2	29.5	-0.7	17	17	-16
11	8,579	27.5	25.3	-2.2	14	12	-43
12	7,146	25.4	26.8	1.4	12	14	33

Table 12

1979-80 Title I Reading Achievement Results
for Students Tested on a Fall-to-Spring Schedule
(50 States Plus the District of Columbia)

Grade	Weighted Number Tested	Normal Curve Equivalent			Percentile		Percent Additional Growth
		Pretest	Posttest	Gain	Pretest	Posttest	
2	310,555	30.8	40.2	9.4	18	32	77
3	293,909	28.7	36.1	7.4	16	26	90
4	270,826	28.7	35.6	7.0	16	25	111
5	246,159	29.4	35.5	6.1	16	25	132
6	212,819	29.7	35.7	6.0	17	25	158
7	152,417	28.8	34.3	5.5	16	23	124
8	122,013	29.0	34.0	5.0	16	22	113
9	66,475	28.3	33.5	5.2	15	22	163
10	36,102	28.6	32.8	4.2	16	21	131
11	17,734	27.3	30.5	3.2	14	18	123
12	8,383	25.6	30.0	4.4	12	17	133

Table 13

1979-80 Title I Full Year Reading Achievement Results
For All Education Agencies With at Least 100 Students Tested

Grade	Number of States	Normal Curve Equivalents								
		Pretest			Postest			Gain		
		Min	Median	Max	Min	Median	Max	Min	Median	Max
2	34	22.3	35.2	49.8	28.0	40.1	52.6	-3.9	3.1	12.6
3	31	18.0	33.3	45.1	25.7	35.9	47.2	-1.0	2.6	13.0
4	33	24.4	31.9	43.9	27.7	34.7	46.5	-2.5	2.7	8.2
5	32	21.1	30.5	44.6	24.3	34.4	46.8	-0.1	3.2	9.2
6	33	21.8	31.4	43.9	26.6	35.1	46.3	-0.7	3.4	6.7
7	26	18.7	29.7	46.3	17.9	31.9	47.4	-4.5	2.0	6.0
8	23	23.2	27.7	44.4	24.7	29.9	46.7	-2.8	2.2	5.5
9	15	22.2	29.7	42.9	16.7	32.1	46.3	-8.2	2.5	4.8
10	10	18.9	28.9	44.3	17.8	25.6	45.7	-5.6	0.2	3.3
11	8	16.5	25.2	35.2	11.5	24.5	36.4	-5.3	0.8	3.7
12	8	14.6	23.3	38.0	15.1	26.5	37.6	-4.2	2.3	4.8

Table 14

1979-80 Title I Fall-to-Spring Reading Achievement Results for All
State Education Agencies With at Least 100 Students Tested

Grade	Number of States	Normal Curve Equivalents								
		Pretest			Posttest			Gain		
		Min	Median	Max	Min	Median	Max	Min	Median	Max
2	51	16.4	31.5	42.0	24.7	40.9	49.7	0.0	8.9	16.0
3	50	15.1	29.4	37.9	26.4	37.2	44.5	2.6	7.6	13.0
4	49	16.0	29.3	37.2	25.0	36.3	44.5	1.1	7.1	12.1
5	48	18.0	29.5	39.5	18.9	35.6	43.9	-1.5	6.2	11.8
6	50	17.3	29.1	36.1	15.4	35.0	43.4	-1.9	5.9	11.1
7	47	16.6	28.5	37.2	22.6	34.9	46.7	2.9	5.8	9.9
8	46	14.9	28.0	36.6	18.6	33.5	40.9	2.4	5.6	11.1
9	39	18.6	27.5	33.8	21.8	32.9	43.6	3.1	5.1	11.3
10	35	17.9	28.2	37.9	22.6	32.9	42.8	-1.2	4.7	11.2
11	24	9.2	25.4	33.2	16.0	28.8	39.0	1.5	2.9	6.8
12	12	13.9	26.0	34.3	17.6	30.2	41.3	0.0	4.1	7.0

Table 15

1979-80 Title I Mathematics Achievement Results
for Students Tested on a Full-Year Schedule
(50 States plus the District of Columbia)

Grade	Weighted Number Tested	Normal Curve Equivalent			Percentile		Percent Additional Growth
		Pretest	Posttest	Gain	Pretest	Posttest	
2	50,084	41.9	43.0	1.1	35	37	5
3	65,407	39.7	40.1	0.4	31	32	0.2
4	70,637	37.5	39.2	1.8	28	30	15
5	71,038	36.6	39.0	2.5	26	30	23
6	69,002	35.4	39.3	3.9	24	31	44
7	36,268	34.5	36.7	2.2	23	26	29
8	29,530	34.3	37.1	2.8	23	27	44
9	15,971	34.6	35.1	0.5	23	24	10
10	7,718	32.9	31.6	-1.4	21	19	-34
11	4,158	34.9	35.3	0.4	24	24	11
12	3,587	33.8	34.9	1.0	22	24	48

Table 16

1979-80 Title I Mathematics Achievement Results
for Students Tested on a Fall-to-Spring Schedule
(50 States plus the District of Columbia)

Grade	Weighted Number Tested	Normal Curve Equivalent			Percentile		Percent Additional Growth
		Pretest	Posttest	Gain	Pretest	Posttest	
2	124,576	32.0	42.5	10.5	20	36	88
3	137,608	31.5	40.1	8.6	19	32	69
4	147,333	30.8	39.8	9.0	18	31	134
5	136,872	30.5	38.7	8.2	18	30	115
6	119,003	30.9	38.6	7.7	18	29	141
7	74,807	30.6	36.9	6.3	18	27	150
8	60,747	30.1	36.3	6.2	17	26	184
9	28,579	29.8	35.9	6.2	17	25	200
10	12,192	32.0	37.3	5.3	20	27	204
11	5,270	32.5	38.1	5.6	20	29	311
12	2,195	30.7	37.2	6.5	18	27	650

Table 17

1979-80 Title I Full Year Mathematics Achievement Results
For All State Education Agencies With at Least 100 Students Tested

Grade	Number of States	Normal Curve Equivalents								
		Pretest			Posttest			Gain		
		Min	Median	Max	Min	Median	Max	Min	Median	Max
2	23	25.6	37.3	48.8	30.9	41.5	47.6	-3.2	3.8	10.5
3	26	22.0	35.1	49.8	28.5	39.1	51.6	-3.0	3.4	18.6
4	31	21.3	33.1	49.2	28.2	36.8	51.6	-8.4	4.2	16.7
5	30	20.7	33.1	49.4	25.7	36.5	56.4	-1.5	3.5	14.8
6	29	22.0	32.2	46.3	29.3	36.7	49.9	1.1	4.4	10.1
7	23	20.8	32.5	44.1	24.6	35.9	50.8	-0.9	2.9	7.9
8	22	22.2	33.2	46.6	26.9	35.0	46.3	-5.0	2.8	7.5
9	13	22.1	29.9	47.7	24.5	32.6	49.2	-6.3	1.5	8.7
10	7	21.2	24.3	51.2	19.9	27.3	48.5	-5.6	-1.2	5.9
11	6	19.2	24.2	49.2	24.4	25.9	47.3	-1.9	1.5	7.2
12	6	19.7	27.0	50.6	18.8	30.4	46.2	-4.4	2.4	5.9

Table 18

1979-80 Title I Fall-to-Spring Mathematics Achievement Results
For All State Education Agencies With at Least 100 Students Tested

Grade	Number of States	Normal Curve Equivalents								
		Pretest			Posttest			Gain		
		Min	Median	Max	Min	Median	Max	Min	Median	Max
2	44	15.1	31.8	39.1	20.8	41.7	50.3	2.6	10.3	23.5
3	45	10.7	31.2	37.9	15.5	39.2	47.8	1.5	8.4	15.1
4	43	17.9	30.7	37.4	25.7	39.1	48.1	2.6	9.5	18.0
5	44	14.6	31.0	38.0	20.2	38.5	47.2	2.8	8.3	15.5
6	46	15.2	29.6	43.1	20.5	37.8	50.0	2.0	7.6	14.0
7	41	9.0	30.0	36.4	22.8	37.8	46.2	2.1	6.2	15.2
8	37	13.3	28.7	37.4	24.4	36.1	43.6	1.0	6.3	18.4
9	25	20.3	28.9	33.5	27.2	33.7	43.2	2.0	6.1	10.6
10	17	23.7	31.1	40.2	26.9	36.6	44.1	-0.1	4.7	10.3
11	7	18.5	33.4	37.4	25.5	40.8	42.4	2.3	5.0	8.4
12	4	30.7	33.1	39.6	31.9	39.8	43.4	0.2	5.2	7.9

Table 19

1979-80 Title I English Language Arts Results
for Students Tested on a Full-Year Schedule
(50 States plus the District of Columbia)

Grade	Weighted Number Tested	Normal Curve Equivalent			Percentile		Percent Additional Growth
		Pretest	Posttest	Gain	Pretest	Posttest	
2	4,250	29.5	31.6	2.2	17	19	10
3	5,981	30.4	32.3	1.9	18	20	14
4	6,261	32.9	33.5	0.7	21	22	17
5	7,055	31.8	33.4	1.5	19	22	14
6	7,321	32.7	34.9	2.3	21	24	45
7	6,415	30.5	32.8	2.3	18	21	44
8	5,540	29.3	32.1	2.8	16	20	43
9	3,518	28.0	28.4	0.4	15	15	13
10	2,318	27.0	25.6	-1.4	14	12	-27
11	1,618	25.5	22.9	-2.6	12	10	-48
12	1,455	23.3	22.6	-0.6	10	10	-22

Table 20

1979-80 Title I English Language Arts Results
for Students Tested on a Fall-to-Spring Schedule
(50 States plus the District of Columbia)

Grade	Weighted Number Tested	Normal Curve Equivalent			Percentile		Percent Additional Growth
		Pretest	Posttest	Gain	Pretest	Posttest	
2	13,655	34.5	41.5	6.9	23	34	64
3	13,159	32.4	40.5	8.0	20	33	90
4	12,710	32.6	39.4	6.8	20	31	113
5	12,810	33.6	39.5	5.8	22	31	87
6	12,542	33.5	40.2	6.7	22	32	203
7	9,753	29.0	34.2	5.2	16	23	179
8	8,809	30.5	33.9	3.4	18	22	85
9	4,951	30.0	34.7	4.7	17	23	235
10	3,111	28.4	32.9	4.5	15	21	127
11	1,740	27.6	31.2	3.6	14	19	109
12	923	27.2	30.4	3.2	14	18	160

Table 23

Distribution of Full Year Mathematics Mean NCE Scores for States
With at Least 100 Students Tested

Grade	Number of States	Pretest Percentile								Posttest Percentile								NCE Gain							
		<15th		15.1-25th		25.1-40th		>40th		<15th		15.1-25th		25.1-40th		>40th		<0.0		0.0-3.5		3.6-7.0		>7.0	
		N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
2	23	3	(13)	7	(30)	7	(30)	6	(26)	0	(0)	5	(22)	4	(17)	14	(61)	3	(13)	7	(30)	9	(39)	4	(17)
3	26	4	(15)	11	(42)	8	(31)	3	(12)	0	(0)	6	(23)	11	(42)	9	(35)	5	(19)	8	(31)	9	(35)	4	(15)
4	31	6	(19)	16	(52)	3	(10)	6	(19)	1	(3)	13	(42)	8	(26)	9	(29)	4	(13)	11	(35)	12	(39)	4	(13)
5	30	7	(23)	15	(50)	5	(17)	3	(10)	2	(7)	12	(40)	7	(23)	9	(30)	2	(7)	14	(47)	8	(27)	6	(20)
6	29	7	(24)	17	(59)	2	(7)	3	(10)	0	(0)	12	(41)	12	(41)	5	(17)	0	(0)	9	(31)	16	(55)	4	(14)
7	23	6	(26)	11	(48)	4	(17)	2	(9)	4	(17)	7	(30)	8	(35)	4	(17)	3	(13)	11	(48)	8	(35)	1	(4)
8	22	4	(18)	10	(45)	5	(23)	3	(14)	2	(9)	9	(41)	5	(23)	6	(27)	3	(14)	14	(64)	4	(18)	1	(5)
9	13	4	(31)	6	(46)	1	(8)	2	(15)	3	(23)	6	(46)	2	(15)	2	(15)	4	(31)	6	(46)	2	(15)	1	(8)
10	7	4	(57)	1	(14)	1	(14)	1	(14)	4	(57)	2	(29)	0	(0)	1	(14)	4	(57)	2	(29)	1	(14)	0	(0)
11	6	4	(67)	0	(0)	1	(17)	1	(17)	4	(67)	0	(0)	1	(17)	1	(17)	2	(23)	3	(50)	0	(0)	1	(17)
12	6	3	(50)	1	(17)	1	(17)	1	(17)	3	(50)	1	(17)	0	(0)	2	(23)	2	(33)	2	(33)	2	(33)	0	(0)

Table 24

Distribution of Fall to Spring Mathematics Mean NCE Scores for States
With at Least 100 Students Tested

Grade	Number of States	Pretest Percentile								Posttest Percentile								NCE Gain							
		<15th		15.1-25th		25.1-40th		>40th		<15th		15.1-25th		25.1-40th		>40th		<0.0		0.0-3.5		3.6-7.0		>7.0	
		N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
2	44	14	(32)	25	(57)	5	(11)	0	(0)	1	(2)	7	(16)	12	(27)	24	(55)	0	(0)	2	(5)	4	(9)	38	(86)
3	45	10	(22)	32	(71)	3	(7)	0	(0)	2	(4)	8	(18)	20	(44)	15	(33)	0	(0)	2	(4)	12	(27)	31	(69)
4	43	13	(30)	27	(63)	3	(7)	0	(0)	1	(2)	8	(19)	19	(44)	14	(33)	0	(0)	1	(2)	8	(19)	34	(79)
5	44	15	(34)	26	(59)	3	(7)	0	(0)	2	(5)	11	(25)	21	(48)	10	(23)	0	(0)	1	(2)	11	(25)	32	(73)
6	46	17	(37)	25	(54)	3	(7)	1	(2)	3	(7)	15	(33)	13	(28)	15	(33)	0	(0)	2	(4)	15	(33)	29	(63)
7	41	14	(34)	25	(61)	2	(5)	0	(0)	1	(2)	17	(41)	18	(44)	5	(12)	0	(0)	2	(5)	23	(56)	16	(39)
8	37	13	(35)	21	(57)	3	(8)	0	(0)	3	(8)	15	(41)	16	(43)	3	(8)	0	(0)	2	(5)	20	(54)	15	(41)
9	25	11	(44)	14	(56)	0	(0)	0	(0)	3	(12)	11	(44)	10	(40)	1	(4)	0	(0)	3	(12)	13	(52)	9	(36)
10	17	8	(47)	6	(35)	3	(18)	0	(0)	1	(6)	5	(29)	8	(47)	3	(18)	1	(6)	1	(6)	9	(53)	6	(35)
11	7	3	(43)	2	(29)	2	(29)	0	(0)	1	(14)	2	(29)	2	(29)	2	(29)	0	(0)	1	(14)	5	(71)	1	(14)
12	4	0	(0)	3	(75)	1	(25)	0	(0)	0	(0)	1	(25)	2	(50)	1	(25)	0	(0)	1	(25)	2	(50)	1	(25)

Table 21

Distribution of Full Year Reading Mean NCE Scores for States
With at Least 100 Students Tested

Grade	Number of States	Pretest Percentile								Posttest Percentile								NCE Gain							
		<15th		15.1-25th		25.1-40th		>40th		<15th		15.1-25th		25.1-40th		>40th		<0.0		0.0-3.5		3.6-7.0		>7.0	
		N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
2	34	4	(12)	15	(44)	9	(26)	6	(18)	1	(3)	9	(26)	11	(32)	13	(38)	5	(15)	14	(41)	9	(26)	6	(18)
3	31	6	(19)	14	(45)	9	(29)	2	(6)	2	(6)	13	(42)	12	(39)	4	(13)	3	(10)	19	(61)	7	(23)	2	(6)
4	33	6	(18)	20	(61)	6	(18)	1	(3)	3	(9)	18	(55)	9	(27)	3	(9)	4	(12)	17	(52)	10	(30)	2	(6)
5	32	9	(28)	16	(50)	5	(16)	2	(6)	4	(13)	15	(47)	9	(28)	4	(13)	1	(3)	17	(53)	13	(41)	1	(3)
6	33	6	(18)	22	(67)	4	(12)	1	(3)	4	(12)	14	(42)	11	(33)	4	(12)	1	(3)	16	(48)	16	(48)	0	(0)
7	26	11	(42)	11	(42)	3	(12)	1	(4)	8	(31)	13	(50)	3	(12)	2	(8)	3	(12)	17	(65)	6	(23)	0	(0)
8	23	12	(52)	7	(30)	3	(13)	1	(4)	7	(30)	11	(48)	3	(13)	2	(9)	2	(9)	19	(83)	2	(9)	0	(0)
9	15	5	(33)	7	(47)	2	(13)	1	(7)	4	(27)	7	(47)	2	(13)	2	(13)	4	(27)	7	(47)	4	(27)	0	(0)
10	10	5	(50)	4	(40)	0	(0)	1	(10)	6	(60)	3	(30)	0	(0)	1	(10)	5	(50)	5	(50)	0	(0)	0	(0)
11	8	6	(75)	2	(25)	0	(0)	0	(0)	6	(75)	1	(13)	1	(13)	0	(0)	3	(38)	4	(50)	1	(13)	0	(0)
12	8	5	(63)	2	(25)	1	(13)	0	(0)	5	(63)	2	(25)	1	(13)	0	(0)	2	(25)	4	(50)	2	(25)	0	(0)

Table 22

Distribution of Fall to Spring Reading Mean NCE Scores for States
With at Least 100 Students Tested

Grade	Number of States	Pretest Percentile								Posttest Percentile								NCE Gain							
		<15th		15.1-25th		25.1-40th		>40th		<15th		15.1-25th		25.1-40th		>40th		<0.0		0.0-3.5		3.6-7.0		>7.0	
		N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
2	51	12	(23)	32	(63)	6	(12)	1	(0)	1	(2)	9	(18)	16	(31)	25	(49)	0	(0)	1	(2)	7	(14)	43	(84)
3	50	19	(38)	28	(56)	3	(6)	0	(0)	2	(4)	20	(40)	20	(40)	8	(16)	0	(0)	1	(2)	19	(38)	30	(60)
4	49	21	(43)	24	(49)	4	(8)	0	(0)	4	(8)	20	(41)	14	(29)	11	(22)	0	(0)	2	(4)	22	(45)	25	(51)
5	48	19	(40)	25	(52)	4	(8)	0	(0)	3	(6)	22	(46)	15	(31)	8	(17)	1	(2)	3	(6)	27	(56)	17	(35)
6	50	21	(42)	27	(54)	2	(4)	0	(0)	2	(4)	26	(52)	18	(36)	4	(8)	1	(2)	1	(2)	31	(62)	17	(34)
7	47	23	(49)	21	(45)	3	(6)	0	(0)	4	(9)	25	(53)	14	(30)	4	(9)	0	(0)	4	(9)	31	(66)	12	(26)
8	46	24	(52)	21	(46)	1	(2)	0	(0)	6	(13)	25	(54)	15	(33)	0	(0)	0	(0)	7	(15)	32	(70)	7	(15)
9	39	23	(59)	16	(41)	0	(0)	0	(0)	8	(21)	22	(56)	7	(18)	2	(5)	0	(0)	3	(8)	33	(85)	3	(8)
10	35	18	(51)	16	(46)	1	(3)	0	(0)	10	(29)	18	(51)	5	(14)	2	(6)	1	(3)	9	(26)	22	(63)	3	(9)
11	24	17	(71)	7	(29)	0	(0)	0	(0)	12	(50)	10	(42)	2	(8)	0	(0)	0	(0)	13	(54)	11	(46)	0	(0)
12	12	9	(75)	3	(25)	0	(0)	0	(0)	4	(33)	6	(50)	1	(8)	1	(8)	0	(0)	5	(42)	7	(58)	0	(0)

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